

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021825**Date Inspected:** 15-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14

This QA Inspector observed that the segment 13AW has been moved out to the Orthotropic Bridge Girder (OBG) trial assembly from bay 14 for alignment with segment 12CW. See attached photographs for additional details.

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020BB-109 [Vertical Shear Plate SA3442A to Anchor Plate (AP) 3032A, Complete Joint Penetration (CJP) weld at panel point (PP) 126]. The welder is identified as 067588 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair-1. Repair welding was done as per Welding Repair Report (WRR):

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B-WR 20379 Rev-1.

Repair welding of weld joint no: SEG3020BB-113 [Vertical Shear Plate SA3447A to Anchor Plate (AP) 3032A, Complete Joint Penetration (CJP) weld at panel point (PP) 126]. The welder is identified as 045246 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair-1. Repair welding was done as per Welding Repair Report (WRR): B-WR 20379 Rev-1.

Repair welding of weld joint no: SEG3020BB-110 [Vertical Shear Plate SA3444A to Anchor Plate (AP) 3032A, Complete Joint Penetration (CJP) weld at panel point (PP) 126]. The welder is identified as 051348 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair-1. Repair welding was done as per Welding Repair Report (WRR): B-WR 20379 Rev-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020C-056 (Side Plate SP3143C/ SP3142F to Floor Beam (FB) 3348A, CJP weld at panel point PP 128.7). The welder is identified as 047866 and was observed welding in the 3G position. AB/F QA was identified as Mr. Xu Wen Bin. The welding variables recorded by QA appeared to comply with WPS: B-T-2233-ESAB. Attached photograph provide additional details.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AW-089 (Side Plate 3132A to Side Plate SP3145B, CJP weld). The welders are identified as 067520 & 037779 and were observed welding in the 2G position. ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1. Attached photograph provide additional details.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AW-092 (Side Plate 3131A to Side Plate SP3144B/SP3145B, CJP weld). The welders are identified as 067942 & 067765 and were observed welding in the 4G position. ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1. Attached photograph provide additional details.

The SMAW process on weld joint no: FB3316-001-095 [X4833A to X4833B (of FB3316A), fillet weld at PP125]. The welders are identified as 067572 and 067609 and were observed welding in 4F position. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2114-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AJ-016 [I-rib stiffener (RS3516) on Bottom Panel (BP) 3088A to Floor Beam (FB) 3315A, complete joint penetration (CJP) weld at PP125]. The welder is identified as 066239 and was observed welding in 3G position. ZPMC Quality Control (QC) was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-T-2233-ESAB.

The FCAW process on weld joint no: SEG3020AJ-015 [I-rib stiffener (RS3516) to I-rib stiffener (RS3512D) on BP3088A, CJP weld at PP125]. The welder is identified as 066239 and was observed welding in 3G position.

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ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer